

C. Wilder



1600

ENTERED

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/463,510

DATE: 04/08/2002

TIME: 10:58:15

Input Set : A:\WARF0038.ST25.txt

Output Set: N:\CRF3\04082002\I463510.raw

3 <110> APPLICANT: Helgeson, John P.  
 4 Austin, Sandra  
 5 Naess, Sara K.  
 7 <120> TITLE OF INVENTION: Germplasm And Molecular Markers For Disease Resistance In  
 Potato  
 9 <130> FILE REFERENCE: WARF0038  
 11 <140> CURRENT APPLICATION NUMBER: 09/463,510  
 12 <141> CURRENT FILING DATE: 2000-06-26  
 14 <150> PRIOR APPLICATION NUMBER: 60/054,267  
 15 <151> PRIOR FILING DATE: 1997-07-30  
 17 <150> PRIOR APPLICATION NUMBER: US98/15910  
 18 <151> PRIOR FILING DATE: 1998-07-27  
 20 <160> NUMBER OF SEQ ID NOS: 5  
 22 <170> SOFTWARE: PatentIn version 3.1  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 586  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Solanum bulbocastanum  
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 32 tgccatgatg gcttaactgg ttgtttcaag tatggccaga acggttattt tatgagagag 120  
 34 ttccaaaga acatgcaggg taatggtaat ggggataata gaaccagtc ttcttcagt 180  
 36 actccaccag acagagctgc atctagagga gctacttoga ggcaggcgga ggatcgaacg 240  
 38 tctttatgct atcactagtc gccaaagaaa agaggattcg ccagatgttg tcaactggat 300  
 40 gatccaagtc ttttaactttg attttatact tttctagatc caggagcgag tttatccttt 360  
 42 gtaactcctt atgttgcggt taattttgat gttcttcccta agaaacttat tgagcccttc 420  
 44 agtgtttcta cacttggttg totattatag tagagagagt ctgttatgat tgtaccgttt 480  
 46 tcgtcaatca caagagcacc atggttgatt tagttgagtt agacatgga gaatttgatg 540  
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 51 <210> SEQ ID NO: 2  
 52 <211> LENGTH: 587  
 53 <212> TYPE: DNA  
 54 <213> ORGANISM: Solanum bulbocastanum  
 56 <220> FEATURE:  
 57 <221> NAME/KEY: misc\_feature  
 58 <222> LOCATION: (88)..(88)  
 59 <223> OTHER INFORMATION: N is any nucleotide  
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 63 <221> NAME/KEY: misc\_feature  
 64 <222> LOCATION: (221)..(221)  
 65 <223> OTHER INFORMATION: N is any nucleotide  
 68 <220> FEATURE:  
 69 <221> NAME/KEY: misc\_feature  
 70 <222> LOCATION: (251)..(251)

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71 <223> OTHER INFORMATION: N is any nucleotide
74 <220> FEATURE:
75 <221> NAME/KEY: misc_feature
76 <222> LOCATION: (290)..(290)
77 <223> OTHER INFORMATION: N.is any nucleotide
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W--> 83 tcttttgcaa agtttacttt tttattantt aatcttggtt gtgtctggag gtggtggtgg      120
85 ggtgggtag tagtggaagct agaaatttag ttaagtgtgt tcaagattta aatatacata      180
W--> 87 tgaaaaataa tttttgatct atatatatag ttataatttt ntgatgaagg tagttcaact      240
W--> 89 gaccacccgt nactacatgt ggctaccgta ctgggtgggg tggaaggctc ttggtgtttac      300
91 agtcatgttg gggcctctga aatgcttttg tgggcaatgt ggaattact gtttatcttt      360
93 tctttattga agtcattgag tgtttgagtt atttaactat gaaaggtagc tagtgggtaa      420
95 tgttattgat gactttgtgt gaagaacaaa atgtcaatca ttcagagcgt tcaatggggg      480
97 cacgtgctgg agtcccatct ggattatttg gtttaggggt tgcctagggt gtggtggtgg      540
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103 <211> LENGTH: 596
104 <212> TYPE: DNA
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107 <400> SEQUENCE: 3
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112 gtggatttgt tcaagagctt gaagacataa cgagtagtag ttagataat cagaccaga      180
114 ggccgagatt catggaatcc gtctcaaaact ttttaagacg acaaactctca gctacaagta      240
116 atacttctga gagagggaga tctgatgggg gtgctgaacg aggaaatttg tggaatccgt      300
118 tgctgatttt cagtgggtgat acgctgttgc atatgcctgg ggatggtgga gttttggagt      360
120 ttcttaatga ggcaccttgg attccgagca agaaaatggt ggtgattatt ttgttggtcc      420
122 aggagtggag gaattttttg aagaaattgt aaatagaaat cagcgtggtg ctctcctcc      480
124 tgtctcgaga tgttcaattg attccctacc aacagtcaag atatcaaaaa aggatgtag      540
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131 <212> TYPE: DNA
132 <213> ORGANISM: Solanum tuberosum
134 <400> SEQUENCE: 4
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139 gtggatttgt tcaagagctt gaagacataa cgagtagtag ttagataat cagagccaga      180
141 ggccgagatt tatggaatcc gtctcaaaact ttttaagacg acaaactcgt acaagtaata      240
143 ctctcgagag agggagatct gatgggggtg ctgaacgagg aaatttatgg aatccattgc      300
145 tgattttcag tggtgatacg cctgttcaag atgcctgggg atggtggagt tttggagttt      360
147 cttaatgagg ctcttggtct cgcacaagaa aatgggtggtg attattttgt tgggtccagga      420
149 gtggaggaat tttttgaaga aattgtaaat agaaatcagc gtggtgctcc tctgcctca      480
151 agatgttcaa ttgattccct accaacagtc aagatatcga aaaaagatgt tagatcgga      540
153 tctcactgcc ctgtttgtaa agagaaattt gctctgggga ctaaggcaa      589
156 <210> SEQ ID NO: 5
157 <211> LENGTH: 592
158 <212> TYPE: DNA

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159 &lt;213&gt; ORGANISM: Solanum bulbocastanum

161 &lt;220&gt; FEATURE:

162 &lt;221&gt; NAME/KEY: misc\_feature

163 &lt;222&gt; LOCATION: (405)..(405)

164 &lt;223&gt; OTHER INFORMATION: N is any nucleotide

167 &lt;400&gt; SEQUENCE: 5

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170 atagttgtag acaaccctg aatctcagca gacaaaatga tgtttgcccc aattgcggtg 120

172 gtggatttgt tcaagagctt gaagacataa cgagtagtag tntagataat cagagccaga 180

174 ggccgagatt catggaatcc gtctcaaact ttttaagacg acaaatccca actacaagta 240

176 atacttcttg agagagggag atctgatggg ggtgctgaac gaggaaattt gtggaatccg 300

178 ttgctgattt tcagtgggtga tacacctgtt cggatgcctg gggatggtgg agttttggag 360

W--&gt; 180 tttcttaatg aggctcttgg ctttcgacaa gaaaatggtg gtgantattt tgttggccca 420

182 ggagtggagg agttttttga agaaattgta aataaaaatc agcgtggtgc tcctcctgct 480

184 tcaagatgct caattgattc cctaccaaca gtcaagatat cgaaaaagga tgttagatcg 540

186 gattctcact gccctgtttg taaagagaaa ttgctctggt ggactaaggc aa 592

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/463,510

DATE: 04/08/2002

TIME: 10:58:16

Input Set : A:\WARF0038.ST25.txt

Output Set: N:\CRF3\04082002\I463510.raw

L:83 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:87 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5